86TH CONGRESS } HOUSE OF REPRESENTATIVES { REPORT
1st Session } { No. 574

DESIGNATING THE NEW LOCK ON THE ST. MARYS RIVER AT SAULT STE. MARIE, MICH., AS THE JOHN A. BLATNIK LOCK

JUNE 23, 1959.—Referred to the House Calendar and ordered to be printed

Mr. BUCKLEY, from the Committee on Public Works, submitted the following

REPORT

[To accompany H.R. 7808]

The Committee on Public Works, to whom was referred the bill (H.R. 7808) to designate the new lock on the St. Marys River at Sault Ste. Marie, Mich., as the John A. Blatnik lock, having considered the same, report favorably thereon without amendment and recommend that the bill do pass.

PURPOSE OF THE BILL

The purpose of the bill is to designate the lock to be constructed to replace the existing Poe lock on the St. Marys River at Sault Ste. Marie, Mich., as the John A. Blaknik lock in honor of the Representative from Minnesota, who is chairman of the Subcommittee on Rivers and Harbors of the Committee on Public Works.

GENERAL STATEMENT

The formal opening of the St. Lawrence Seaway on June 26, 1959, marks the beginning of the last phase of one of the most tremendous projects ever to affect the economy of the United States and the Midwest in particular. For many years foresighted individuals have fought for the opening of the Great Lakes area to the ocean. The transit of oceangoing ships through the mighty St. Lawrence and into the great Lakes will bring the products of all foreign countries directly to the great heartland of the United States and will permit the products of the midwestern area to be exported by low-cost shipping to all parts of the world.

In order to utilize the St. Lawrence Seaway to its full capacity other concomitant projects are necessary. One is the deepening of the con-

necting channels in the Great Lakes to depths commensurate with the seaway. The other is the deepening of the major harbors to accommodate the shipping which will be able to use the seaway and the connecting channels.

Among the projects required to permit deep-draft shipping to pass between the lakes is the replacement of the existing Poe lock in the St. Marys River at Sault Ste. Marie, Mich. This lock is a masonry structure completed in 1896. The new lock will be 800 feet long, 100 feet wide and 32 feet deep. It was authorized by the act of July 24, 1946 (Public Law 525 of the 79th Cong.) in accordance with House Document 335 of the 80th Congress. The estimated cost of the structure is $40,100,000. A total of $358,000 has been made available through the fiscal year 1959 for preconstruction planning, and an additional $367,000 is contained in the pending public works appropriation bill for the fiscal year 1960. These funds will complete the preconstruction planning and will permit work to get underway in the fiscal year 1961.

As a member of the Committee on Public Works and as chairman of the Subcommittee on Rivers and Harbors no one has shown greater leadership than John A. Blatnik in all projects needed for making the goal of deep-draft navigation available to the Great Lakes. His dauntless championship of the St. Lawrence Seaway over a long period of years and his persistent and successful efforts for deep-draft harbor improvements and deep-draft connecting channels on the Great Lakes is considered by the committee to be one of the greatest contributions made toward the overall Great Lakes–St. Lawrence waterway system. The committee considers it a fitting tribute that the new lock to replace the existing Poe lock be named after the Honorable John A. Blatnik, Member of Congress, Eighth District of Minnesota and voted unanimously to report H.R. 7808.

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Union Calendar No. 222

86th Congress, 1st Session - - - - - House Report No. 575

NUCLEAR EXPLOSIONS IN SPACE

REPORT

OF THE

COMMITTEE ON SCIENCE AND ASTRONAUTICS

U.S. HOUSE OF REPRESENTATIVES

EIGHTY-SIXTH CONGRESS

FIRST SESSION

JUNE 23, 1959.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

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UNITED STATES

GOVERNMENT PRINTING OFFICE

WASHINGTON : 1959

59014 Res., Vol. 4, O—61

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LETTER OF TRANSMITTAL

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE AND ASTRONAUTICS,
Washington, D.C., June 5, 1959.

Hon. OVERTON BROOKS,
Chairman, Committee on Science and Astronautics.

DEAR MR. CHAIRMAN: I am forwarding herewith for committee consideration a report on "Nuclear Explosions in Space" prepared by Dr. Charles S. Sheldon II, technical director of the committee and reviewed by the other members of the professional staff.

This report is based on an executive hearing of the committee which has in large part since been declassified, and only those parts which the Department of Defense reported to us to be free from classified security information have been used in drafting the report. The witnesses were Dr. Herbert F. York, Director of Defense Research and Engineering, and Dr. Frank Shelton, Technical Director of the Armed Forces Special Weapons Project.

The report summarizes the nonclassified parts of the testimony, and incorporates some general committee views on this important subject.

CHARLES F. DUCANDER,
Executive Director and Chief Counsel.

LETTER OF SUBMITTAL

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE AND ASTRONAUTICS,
Washington, D.C., June 23, 1959.

HON. SAM RAYBURN,
Speaker of the House of Representatives,
Washington, D.C.

DEAR MR. SPEAKER: By direction of the Committee on Science and Astronautics, I submit the enclosed report "Nuclear Explosions in Space."

This report has been prepared following an investigative hearing by the full committee, with particular reference to the tests known as Project Argus. At a meeting of the committee, the report was adopted and approved for submission to the House.

The conclusions noted herein giving recognition to the potentialities of nuclear explosions in space are offered to the 86th Congress for consideration.

OVERTON BROOKS, *Chairman.*

Union Calendar No. 222

86TH CONGRESS, *1st Session* } HOUSE OF REPRESENTATIVES { REPORT No. 575

NUCLEAR EXPLOSIONS IN SPACE

JUNE 23, 1959.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. BROOKS of Louisiana, from the Committee on Science and Astronautics, submitted the following

REPORT

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NUCLEAR EXPLOSIONS IN SPACE

INTRODUCTION

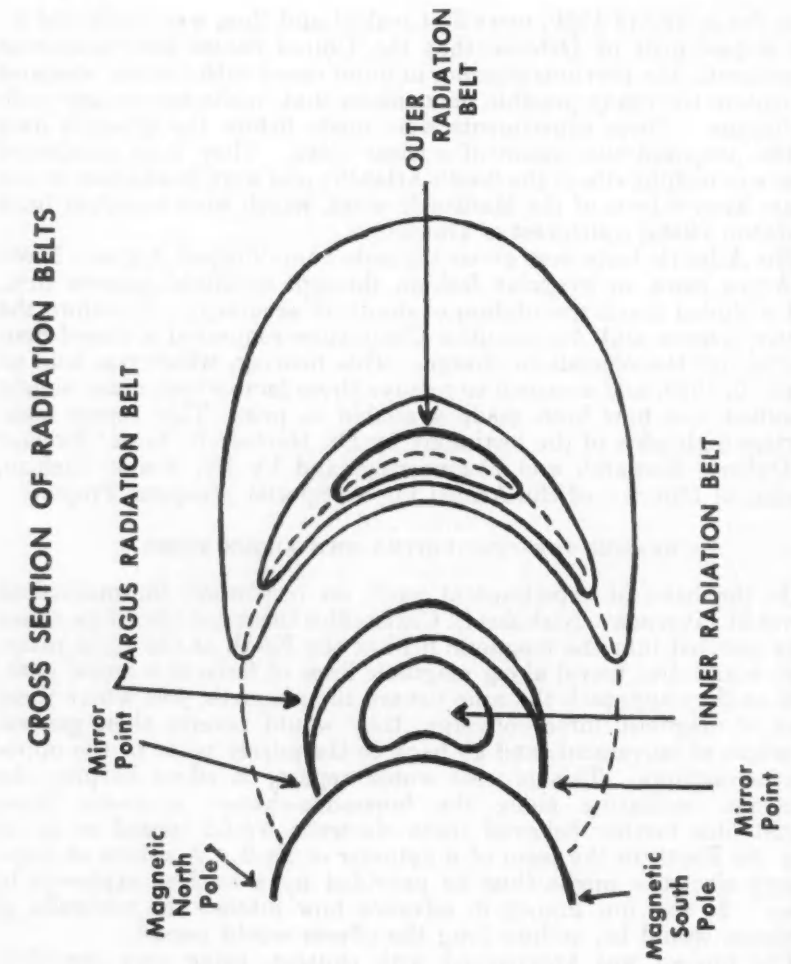
In the spring of 1959, news first leaked and then was confirmed by the Department of Defense that the United States had conducted experiments the previous summer in outer space with nuclear weapons to explore the many possible phenomena that might accompany such explosions. These experiments were made before the effective date of the proposed suspension of nuclear tests. They were conducted from a launching site in the South Atlantic, and were in addition to the better known tests of the Hardtack series, which were launched from Johnston Island southwest of Hawaii.

The Atlantic tests were given the code name Project Argus. News of Argus came in irregular fashion through unofficial sources first, and included much speculation of doubtful accuracy. Therefore the House Science and Astronautics Committee requested a closed-door briefing by the officials in charge. This hearing, which was held on April 10, 1959, and screened to remove those facts which must remain classified, has now been made available in print. This report summarizes highlights of the testimony by Dr. Herbert F. York, Director of Defense Research and Engineering, and by Dr. Frank Shelton, Technical Director of the Armed Forces Special Weapons Project.

REASON FOR CONDUCTING THE ARGUS TESTS

On the basis of experimental work on controlled thermonuclear power at Livermore, Nicholas C. Christofilos theorized that if electrons were inserted into the magnetic field of the Earth at the right place, they would first travel along magnetic lines of force in a spiral path, then as they approach the zone toward the magnetic pole where these lines of magnetic force converge, they would reverse their general direction of movement, and go back to the mirror point in the opposite hemisphere. This process would repeat, in effect keeping the electrons oscillating along the horseshoe-shaped magnetic lines. Christofilos further believed these electrons would spread so as to ring the Earth in the form of a cylinder or shell. A source of high-energy electrons might thus be provided by a nuclear explosion in space. It was not known in advance how intense the umbrella of electrons would be, or how long the effects would persist.

The project was approached with caution, using very low-yield nuclear weapons, so that no serious problems of fallout or other unexpected results might follow. On the one hand, the experiment represented pure science on a grand scale, potentially capable of contributing much fundamental knowledge on geophysics, force fields, radiant energy, and particle behavior. On the other hand, there was the possibility that the experiment might have considerable military significance. The electrons in the shell could conceivably become a radiation hazard to future manned satellites in orbit around the Earth. They might also have profound effects on the use of radio communications.


CROSS SECTION OF RADIATION BELTS
OUTER RADIATION BELT
ARGUS RADIATION BELT
INNER RADIATION BELT
Mirror Point
Mirror Point
Magnetic North Pole
Magnetic South Pole

CHOICE OF A LOCATION FOR CONDUCTING THE TESTS

The latitude chosen had to be fairly close to 45°. To pick a site much closer to the Equator would create such a shallow shell with mirror points so close together that the effect probably would not last long enough to provide much significant data. To pick a very high latitude would be to lose the mirror effect because the magnetic lines are not closed noticeably, and there is no trapping.

The reason for choosing the Atlantic rather than the Pacific for the experiment is that the Earth's magnetic field is not located at the geographical center of the Earth, but is offset about 200 miles. Electrons inserted on the Atlantic side of the Earth would be trapped about 700 miles above the Earth. On the Pacific side, with similar insertion, the path of travel to the mirror point for turnaround of the electrons instead of being in the near vacuum of space, would take place below sea level, and this would not create the right conditions for oscillation. Therefore the experiment had to be conducted on the Atlantic side of the world, and preferably at a place where both mirror points would be over international waters.

Because of greater traffic, the North Atlantic would have been an awkward place to launch nuclear weapons. Therefore, the relatively untraveled waters of the South Atlantic were used, with other ships and aircraft assigned to the North Atlantic to observe mirror effects. The ships sent to the South Atlantic had to travel a great distance from normal bases, and to overcome difficult launching conditions on stormy seas.

HOW THE EXPERIMENT WAS CARRIED OUT

The seaplane tender *Norton Sound* with accompanying ships traveled to the South Atlantic. The exact latitudes and longitudes have not been announced. Three X–17 rocket-launching vehicles were used, and three small nuclear weapons were exploded: on August 27, August 30, and September 6, 1958. The altitude of the explosions and the exact yield of the weapons have not been announced.

In order to monitor the results, instruments had been placed in Explorer IV (already in orbit), capable of distinguishing between the natural radiation of the Van Allen belt and the radiation caused by the nuclear blast. Explorer IV had been launched northeast from Cape Canaveral so that it would cover the zone of interest to the Argus experiment, including more northerly and more southerly latitudes.

Some 21 Argo solid-fuel sounding rockets, under the code name Project Jason, were fired with instruments from Wallops Island, Cape Canaveral, and Ramey Air Force Base in Puerto Rico.

Ships were waiting at sea in the general vicinity of the Azores near the mirror point to observe the artificial aurora created there.

OBSERVED TEST RESULTS

Some of the electrons inserted into the magnetic field were not trapped, but plunged into the atmosphere, creating a temporary aurora at the two mirror points for an hour or so. This aurora was visible as colored light to anyone who might have been looking for

it at the right place. It had the effect of interfering with local radio communications, but not on a worldwide basis.

Those electrons which were trapped showed up at the mirror point in peak intensity about a minute after the nuclear explosion. They were created in connection with the decay of fission products, and traveled at close to the speed of light, but along a corkscrew path, so that there was a slight delay in their arrival at the mirror point. In an hour or so, these electrons spread to form the world-encircling shell. The effects persisted quite noticeably for a week or more, with some traces left even after a few months. The shell had a thickness of about 100 miles when 800 miles up, but its thickness depended upon the altitude. At 4,000 miles from the Earth it may have been 1,000 miles thick. In general, the shell was located between the inner and outer Van Allen natural radiation belts, which made it easier to detect than if it had been at the same altitudes as either of the Van Allen belts.

MILITARY SIGNIFICANCE OF THE ARGUS EXPERIMENT

Certain aspects of the Argus experiment remain classified, and are not discussed in this report.

A nuclear explosion in space represents a way to interfere with local communications at the mirror point through the creation of an artificial aurora. Thus a weapon exploded near Tierra del Fuego would have the consequences of a natural magnetic storm in the New York area, or one exploded in the right point in the Indian Ocean could blanket Moscow. Whether this is practical in a military sense is another matter, and must be compared with the possibilities of similar explosions placed on targets rather than at mirror points.

A very large detonation, in contrast to the small test devices, might have a more widespread effect on communications. Rumors of worldwide effects from the Argus tests were inaccurate, misinterpreting some effects of the Hardtack thermonuclear tests in the Pacific.

The tests supplied some data on the injection efficiency of electrons derived from a nuclear explosion.

The tests did not prove that manmade radiation in space would necessarily interfere with manned space vehicles, as the vehicles could fly at different altitudes from those where artificially induced electrons would be trapped.

Dr. York also indicated that the Argus experiment was not a factor one way or the other in his general assessment of the anti-ICBM problem.

SCIENTIFIC SIGNIFICANCE OF THE ARGUS EXPERIMENT

Most of the information about the Argus experiments is being made available to the scientific community on an unclassified basis. The only things being held back with regard to the explosions are the exact yields, the exact times, the exact altitudes, and the exact locations of the launchings. In the opinion of the Department of Defense, this withholding will not do scientific harm, and it will protect certain military information, such as how to identify nuclear explosions in space from among the mass of other data and "noise" showing on instruments.

Argus was conceived before the discovery of the Van Allen radiation belts. It was an experiment on a grand scale, and helped to throw light on a number of natural processes. Undoubtedly, scientists will develop many hypotheses of value as the analysis of the data continues. These relate to the magnetic field, auroras, radio propagation, nuclear-explosion effects, radiation fields, and a better understanding of controlling thermonuclear processes.

THE SECURITY BREACH IN PROJECT ARGUS

Somehow, the New York Times learned of Project Argus at a very early stage, in advance of the tests. If the Times had published the information then, or if the information had reached certain foreign governments, it is quite likely that it would not have been possible to proceed with the tests, even though the information could have been of great military value.

As time passed, the Times demonstrated privately to officials that it was familiar with most of the major parameters of the project, and further became convinced that these would not remain classified much longer because of small leaks from other sources. So in March 1959 the story was published. The Department of Defense then made its own announcements on Project Argus.

The Department of Defense had spent many months following the tests assessing the data, and planned at an appropriate time to release as much of the information about the tests as it could, using the medium of the National Academy of Sciences. Only a few weeks separated the New York Times story and the completion of major preliminary analysis by the Department of Defense.

In testimony before this committee, the representatives of the Department deplored the leak, but also noted how close security had come to being successful. They acknowledged that the leak had been potentially very dangerous.

CONCLUSIONS

Project Argus is symbolic of the stirring times in which we live. On the one hand, it was a boldly conceived experiment in pure science of immense geophysical proportions, labeled by some publicists as the greatest scientific experiment in all history. On the other hand, it had to be conducted as a secret military operation because it involved a host of questions which might affect the balance of military power in the new technologies of missiles and space travel.

In a sense the results were mostly scientific, and the military results were somewhat negative. There has been no announcement that any really compelling military consequences can be foreseen from the experiments that in any way live up to public speculation about nuclear weapons in space. Laymen have wondered whether nuclear weapons in space would create a shell of sufficient intensity as to make manned satellites impractical. They have also wondered whether the intensity of such radiation could in any way create an umbrella of protection against incoming ICBM's, or whether the nuclear warheads of such missiles would be "cooked" to explode prematurely. They have wondered whether radar would be so interfered with as to change the antimissile defense outlook. But the only positive potential military

effect which has been acknowledged by the experts relates to local interference with communications through the creation of artificial auroras.

On the other hand, further drama surrounds the Argus test because of its close link with the broader question of international control of nuclear testing, and the possibilities of detecting such tests wherever they occur. Surface tests have been thought the easiest to detect. Underground blasts are believed by some to be always traceable, and by others to afford a degree of privacy. Now the question of detection of tests in outer space is presented.

Is there a case for continuing experiments with nuclear weapons outside the Earth's atmosphere? What fallout problems, if any, are presented? What international concern should be shown for any proposal to explode a nuclear weapon on the Moon as a way of signaling arrival of a rocket and also as a means for testing the surface, and possibly for catching debris with an orbiting manmade satellite of the Moon for return to Earth? What of recent proposals for firing a thermonuclear weapon many millions of miles away from the Earth as a way of testing the validity of some accepted theories of relativity? What should be done about new proposals to lift a space station weighing thousands of tons through a series of nuclear explosions? What tests should be considered military, and what scientific? What are the places of unilateral national action in such tests, and where must international cooperation be the rule?

Argus has perhaps raised as many questions as it has answered. It is likely not the last word which will be spoken in the area of imaginative experiments on the grand scale. With the rapid improvements expected in man's space capabilities, nuclear energy is certain to play an important part.

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86TH CONGRESS } HOUSE OF REPRESENTATIVES { REPORT
1st Session } { No. 576

VALIDATING AND CONFIRMING A CONTRACT ENTERED INTO BETWEEN THE UNITED STATES AND THE TOWN OF BRIDGEPORT, WASH.

JUNE 23, 1959.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. BLATNIK, from the Committee on Public Works, submitted the following

REPORT

[To accompany H.R. 802]

The Committee on Public Works, to whom was referred the bill (H.R. 802) to validate and confirm a contract entered into between the United States and the town of Bridgeport, Wash., having considered the same, report favorably thereon without amendment and recommend that the bill do pass.

PURPOSE OF THE BILL

The purpose of H.R. 802 is to validate and confirm a contract entered into on June 15, 1950, between the United States and the town of Bridgeport, Wash., providing that the town of Bridgeport, in consideration of annual payments of $2,280 by the United States, will furnish police and fire protection, and other municipal services, to Government facilities located within the corporate limits of the town during the period of construction of the Chief Joseph Dam on the Columbia River, near Bridgeport.

GENERAL STATEMENT

Construction of the Chief Joseph Dam was authorized by the act of July 24, 1946 (60 Stat. 634, 637), and at the beginning of construction of the dam the Corps of Engineers was responsible for providing adequate housing and municipal services for its workers. Instead of following the usual practice at many large projects of constructing a separate Government town complete with housing, utilities, and administrative and commercial facilities, which would have resulted in

costs considerably in excess of rentals and requiring appropriated funds annually, a plan was formulated to avoid a large part of these costs by utilizing available housing in the nearby town of Bridgeport for a majority of the construction personnel, necessitating only a relatively small village being built by the Government for occupancy by its key personnel.

While the town of Bridgeport did have a basic utility plant and could furnish minimum services, it was recognized that the town was completely unable to furnish municipal services, equal to Government standards, without Federal participation. Believing that the statute authorizing construction of the dam constituted sufficient authority for execution of the contract in question, the town of Bridgeport obligated itself to furnish for the Government housing area police protection, fire protection, snow removal services, street maintenance, and street lighting upon the payment by the Government of the sum of $2,280 annually, which sum, it will be noted, is less than the annual salary of one fireman or maintenance man. At the time the contract was executed it was intended that the payments under it were not to be considered as a payment in lieu of taxes, but on the contrary, as a reimbursement to the town to permit the purchase of fire equipment and services to bring protection up to Government standards, as required in the contract.

The Comptroller General has found that the contract is void from the beginning upon the grounds that Bridgeport is obligated to furnish these services by law, that the United States is exempt from taxation, and that the sum paid under the contract is actually an unauthorized payment in lieu of taxes, thereby forcing the Corps of Engineers to seek reimbursement of $14,440 already paid to the town of Bridgeport.

In view of the considerable savings to the Government through the arrangement made for the town of Bridgeport to furnish the necessary municipal services to Government workers housed at the Chief Joseph Dam project, the committee is of the opinion that to require repayment of the sums already paid by the Government pursuant to a decision of the Comptroller General (B–131932, March 13, 1958), rendered 8 years after the contract was entered into, and to leave the town of Bridgeport with the obligation of amortizing the cost of equipment purchased in reliance upon the agreement, would work an injustice upon the taxpaying citizens of the town. Accordingly, the committee recommends enactment of H.R. 802 to validate the contract which was entered into in good faith.

AGENCY COMMENTS

The comments of the Department of the Army, which favors enactment of the bill, and the views of the Comptroller General are set forth below:

DEPARTMENT OF THE ARMY,
Washington, D.C., April 29, 1959.

Hon. CHARLES A. BUCKLEY,
Chairman, Committee on Public Works,
House of Representatives.

DEAR MR. CHAIRMAN: Reference is made to your request for the views of the Department of the Army with respect to H.R. 802, 86th

Congress, a bill to validate and confirm a contract entered into between the United States and the town of Bridgeport, Wash.

This bill would validate a contract between the United States and the town of Bridgeport, Wash., whereby the town agreed to furnish police and fire protection and other municipal services to Federal employees at the Chief Joseph Dam project.

The Department of the Army favors the above-mentioned bill.

Construction of the Chief Joseph Dam on the Columbia River was authorized by the act of July 24, 1946, (60 Stat. 634, 637). This act contains sufficient authorization for provision of the necessary Government-owned housing for engineering and operating personnel. At many large projects of this type a separate Government town is constructed complete with housing, utilities, and administrative and commercial facilities. Such towns require management, maintenance, fire and police protection, garbage and waste disposal, and other community services. These services result in costs considerably in excess of rentals and require appropriated funds annually. On the Chief Joseph Dam project a plan was formulated to avoid a large part of these costs. Available housing in the surrounding community was utilized for a majority of the construction personnel and the Government built a relatively small village for occupancy by its key personnel.

The town of Bridgeport, having a population of approximately 300, was located conveniently to the Chief Joseph Dam. A great savings could be realized by the Government in locating its housing within the town rather than constructing a separate community. It was recognized that Bridgeport was completely unable to furnish municipal services for the Government housing, which increased its population 66 percent by the influx of 200 people. The town did have a basic utility plant and could furnish certain minimum services. The acquisition of land by the United States in the town actually reduced both its income and its borrowing potential by removing the land from the tax lists. Municipal services equal to a decent community standard could be furnished by the town only with Federal assistance. A contract was made whereby the town of Bridgeport obligated itself to furnish for the Government housing area police protection, fire protection, snow removal services, street maintenance, and street lighting upon the payment by the United States of the sum of $2,280 annually. The standards of these services, as required by the contract, are to the specifications of the Government. The annual payment is considered to be equivalent to that paid in taxes by the citizens of the town for similar services. Both parties to the agreement are protected against changes in costs or circumstances by the inclusion of a provision for termination upon proper notice. The savings to the United States can be readily seen as the annual payment to the town is less than the salary of one fireman or maintenance man.

At the time the agreement was reached, it was considered that the statutory authority to construct and maintain Federal housing carried with it authority to do so in a manner consistent with the best interests of the United States. The contract was made upon this premise. The Comptroller General has found that the contract is void from the beginning upon the grounds that Bridgeport is obligated to furnish these services by law, that the United States is exempt from taxation, and that the sum paid under the contract is actually an unauthorized payment in lieu of taxes.

Regardless of bare legal obligation, it does not appear that the town of Bridgeport can be forced to furnish free services comparable to those required under the contract. The alternative is for the Government to provide such services at a greatly increased cost.

The town of Bridgeport entered into the agreement in good faith and performed in the same manner. To require repayment of the sums already paid by the Government and to leave it with the obligation of amortizing the cost of equipment purchased in reliance upon the agreement would work an injustice upon the taxpaying citizens of the town.

The passage of this bill will result in the annual payment by the United States of the sum of $2,280 for the life of the contract, which covers the construction period.

The Bureau of the Budget advised with respect to a companion bill, S. 581, that while there would be no objection to this Department presenting to the committee such report as it considers appropriate, that Office does not favor the enactment of this legislation. The Bureau of the Budget also requested that we make available to the committee the attached copy of the views of the Comptroller General respecting this proposal.

Sincerely yours,

WILBER M. BRUCKER,
Secretary of the Army.

COMPTROLLER GENERAL OF THE UNITED STATES,
Washington, June 30, 1958.

Hon. MAURICE H. STANS,
Director, Bureau of the Budget.

DEAR MR. STANS: In letter dated June 20, 1958, the Assistant Director for Legislative Reference requested our views on S. 3795, entitled "For the relief of the town of Bridgeport, Wash."

The bill, if enacted, would operate to validate contract No. DA–45–108–ENG–565, dated June 15, 1950, between the town of Bridgeport and the Corps of Engineers together with payments heretofore or hereafter made notwithstanding our decision of March 13, 1958, B–131932. A copy of that decision is enclosed.

The contract provides that the town of Bridgeport, in consideration of annual payments of $2,280 by the United States, will furnish police and fire protection, and other municipal services, to Government facilities located within the corporate limits of the town to an extent and standard satisfactory to the Government "but in no event to a less extent and standard than such services are furnished any other residential area of the town."

The record indicates that the annual payment as stipulated in the contract was calculated by an approximation of the tax rates so that the payments would be comparable to those which private citizens would pay for services for corresponding property. It was concluded in the cited decision that the arrangement provided for under the contract is tantamount to general taxation to cover the overall pro rata cost of the involved services, which services presumably have been made available to other residents of the town without special service or other charges other than the payment of general taxes. As such, we concluded that since the annual contract payment is equivalent to

a payment in lieu of taxes without express statutory authority therefor and since the contract would have the effect of nullifying the tax-exempt status of the Government the contract is invalid and void ab initio.

Our decisions in similar situations have held that contracts entered into with municipalities for furnishing fire and police protection and other governmental services to facilities of the Federal Government located within their boundaries do not give rise to valid enforcible obligations. This is in accordance with the principles, recognized by the overwhelming weight of authority that the furnishing of fire protection and similar services is a governmental function the exercise of which carries with it no power to interpose conditions not provided by law.

While in the present instance there may be some equities warranting favorable consideration of the bill, it would accord preferential treatment to the town not accorded to other towns and cities involved in contracts and similar arrangements held invalid by our decisions.

In view of the foregoing we are not in a position to recommend favorable consideration to the bill.

The proposed report on the bill by the Secretary of the Army is returned.

Sincerely yours,

JOSEPH CAMPBELL,
Comptroller General of the United States.

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86TH CONGRESS } HOUSE OF REPRESENTATIVES { REPORT
1st Session } { No. 577

SUSPENSION OF DUTIES ON METAL SCRAP

JUNE 23, 1959.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. MILLS, from the Committee on Ways and Means, submitted the following

REPORT

[To accompany H.R. 6054]

The Committee on Ways and Means, to whom was referred the bill (H.R. 6054) to continue until the close of June 30, 1960, the suspension of duties on metal scrap, and for other purposes, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

The amendment is as follows:

Page 2, strike out lines 3 and 4, and insert:

SEC. 2. This Act shall not apply to any article provided for in section 4541 of the Internal Revenue Code of 1954.

PURPOSE

The purpose of H.R. 6054, as amended by your committee, is to amend section 2 of Public Law 869, 81st Congress, as amended, to continue for 1 year (from the close of June 30, 1959, to the close of June 30, 1960) the suspension of duties on metal scrap. The bill contains the existing proviso that the suspension shall not apply to lead scrap, lead alloy scrap, antimonial lead scrap, scrap battery lead or plates, zinc scrap, or zinc alloy scrap, or to any form of tungsten scrap, tungsten carbide scrap, or tungsten alloy scrap, or to articles of lead, lead alloy, antimonial lead, zinc, or zinc alloy, or to articles of tungsten, tungsten carbide or tungsten alloy, imported for remanufacture by melting. The bill also continues the existing provision that the suspension shall not apply to any article provided for in section 4541 of the Internal Revenue Code of 1954.

GENERAL STATEMENT

The temporary suspension of the duties on imports of metal scrap provided under present law to June 30, 1959, makes free of duty imports of metal scrap including such principal types of scrap as iron and steel, aluminum, magnesium, nickel, and nickel alloys. Your committee's bill would continue this suspension through June 30, 1960. The suspension of duties as provided under present law and its proposed extension under your committee's bill are of no significance with respect to the tariff treatment of imports of tin and tinplate scrap, because imports of such scrap, along with imports of tin in other unmanufactured forms, would not be subject to duty or import taxes in any case.

Section 2 of the bill, as reported, provides that this suspension shall not apply to any article provided for in section 4541 of the Internal Revenue Code of 1954. In general, section 4541 of the Internal Revenue Code of 1954 imposes an import tax on certain copper-bearing ores and concentrates, other articles of which copper is the component material of chief value, and other articles containing 4 percent or more of copper by weight.

Scrap of the various nonferrous metals, whether imported or of domestic origin, may be considered for most purposes simply as relatively small components in the total U.S. supplies of the respective metals, although some manufacturers depend wholly on metal scrap as a source of raw material. The relation of iron and steel scrap to the total supplies of iron and steel is somewhat different from that existing with respect to nonferrous metals. This is because the economical production of steel by the open-hearth process requires that part of the iron-bearing materials used consist of heavy melting scrap. Thus, much iron and steel scrap constitutes a material important to the domestic production of steel. Despite the fact that imports of scrap metals have not in the past few years constituted important components of the total supplies of the various metals, the imports in some cases have represented important sources of the metals for limited numbers of consumers of such metals in some sections of the country.

The rates of duty on the principal types of ferrous and nonferrous metal scrap, the suspension of which would be continued by the bill, are shown in the following table:

Type of scrap	Paragraph No.	Rate of duty
Iron and steel	301	37½ cents per long ton plus additional duties on alloy content.
Aluminum	374	1½ cents per pound.
Nickel and nickel alloy	5 or 389	10½ percent ad valorem or 1¼ cents per pound.
Tin and tinplate	1786	Free.
Magnesium	375	50 percent ad valorem.

Relaying and rerolling rails would, in the absence of this legislation, be dutiable at the rate of one-twentieth of 1 cent per pound plus additional duties on alloy content under paragraphs 305 and 322 of the Tariff Act of 1930, as modified. Other metal articles not considered scrap within the meaning of the tariff classifications but imported to be used in remanufacture by melting are also exempt from

duty under Public Law 869 of the 81st Congress. Such articles would be dutiable in the absence of special legislation, at various rates too numerous to mention in this report. Data on the volume of imports of such articles are not available but it is probable that in the past few years such imports have not been of major importance in connection with this special legislation.

Your committee received favorable reports on the bill from the Departments of the Treasury, State, Interior, Defense, Commerce, and Labor. A favorable report was also received from the Director of the Office of Civil and Defense Mobilization and an informative report from the U.S. Tariff Commission. Your committee has received no information which would indicate any opposition to this legislation.

Your committee is unanimous in urging the enactment of H.R. 6054.

CHANGES IN EXISTING LAW

In compliance with clause 3 of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as introduced, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italics, existing law in which no change is proposed is shown in roman):

PUBLIC LAW 869, 81ST CONGRESS

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act of March 13, 1942 (ch. 180, 56 Stat. 171), as amended, is hereby amended to read as follows:

"SEC. 1. (a) No duties or import taxes shall be levied, collected, or payable under the Tariff Act of 1930, as amended, or under section 3425 of the Internal Revenue Code with respect to metal scrap, or relaying and rerolling rails.

"(b) The word 'scrap', as used in this Act, shall mean all ferrous and nonferrous materials and articles, of which ferrous or nonferrous metal is the component material of chief value, which are second-hand or waste or refuse, or are obsolete, defective or damaged, and which are fit only to be remanufactured, but does not include such nonferrous materials and articles in pig, ingot, or billet form which have passed through a smelting process and which can be commercially used without remanufacture.[1]

"SEC. 2. Articles of which metal is the component material of chief value, other than ores or concentrates or crude metal, imported to be used in remanufacture by melting, shall be accorded entry free of duty and import tax, upon submission of proof, under such regulations and within such time as the Secretary of the Treasury may prescribe, that they have been used in remanufacture by melting: *Provided, however*, That nothing contained in the provisions of this section shall be construed to limit or restrict the exemption granted by section 1 of this Act."

SEC. 2. The amendment made by this Act shall be effective as to merchandise entered, or withdrawn from warehouse, for consumption

[1] For the information of the members of the House, the text of section 1 of the act of March 13, 1942, is shown as amended by section 3 of Public Law 85-453.

on or after the day following the date of the enactment of this Act and before the close of June 30, [1959] *1960*. It shall also be effective as to merchandise entered, or withdrawn from warehouse, for consumption before the period specified where the liquidation of the entry or withdrawal covering the merchandise, or the exaction or decision relating to the rate of duty applicable to the merchandise, has not become final by reason of section 514, Tariff Act of 1930.

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